

TITLE OF INVENTION

I, Arshak Sh. AKOPYAN a U.S. citizen, resident of Glendale, CA have invented combined bottles with hidden cooler.

CROSS-REFERENCE TO RELATED APPLICATIONS

U.S. Patent documents

93,001	July	27,1869	Pietsch	
2,526,165	June	21,1947	Smith	
4,485,636	Dec.	4,1984	Hidalgo	... 62/430
4,768,354	Sep.	6,1988	Barnwell	... 62/457
5,269,368	Dec.	14,1993	Schneider et al.	... 165/46
5,299,433	Apr.	5,1994	Harms et al.	... 62/457.2
5,472,274	Dec.	5,1995	Baillie	... 366/129
D376,955	Dec.,	1996	Petrosyan et al.	... D7/598
6,705,110	Mar.	16,2004	Worsham	... 62/457.4

FIELD OF INVENTION

This invention relates to coolers for beverage bottles, and particularly to portable drink coolers, which use ice as a refrigerant.

BACKGROUND OF THE INVENTION

Possibility to keep and serve beverages in the cooled conditions is a necessity in cases when cooling brings out the best flavor of the beverage.

Most of the time the beverage is being poured into another containers, where the ice is being added to keep the beverage cold. But when the ice starts to melt the beverage becomes diluted.

Large varieties of small portable coolers are now available on market. Some of them may be represented with U.S. patent 5,269368, 6,705110. In these examples the bottles are covered with a jacket made from flexible materials, and the freezing fluids or ice are trapped between walls of the cooler. But those coolers aren't commonly used when the design of the bottle is also important for representation.

In the other type of the coolers represented by U.S. patents 93,001; 5,299,433; 5,472,274 The cooling device is located inside of the liquid. But those coolers can't be used inside of the sealed bottles.

The most commonly used method of cooling bottles when the exterior of the bottle is also important is placing the bottle in a bucket full of ice. This method calls for manipulations with a wet bottle, when the ice starts to melt.

BRIEF SUMMARY OF THE INVENTION

The purpose of the invention was to create a set of bottles for storing and chilling different types of beverages at once. The set contains two bottles, cooler for chilling purposes and strips. The bottles are made from glass. They are built with specially designed inner walls with cavity that after being combined together create a chamber suitable for a specially designed cooler. They have handles for an easy usage.

The cooler is implemented as a liner. The liner is made from a material that is safe for usage and allows easy heat exchange. It is cored and filled with water. Prior to serving the liner needs to be placed in the freezer. After being frozen in the freezer, the ice in the liner will allow to keep the bottles with beverages chilled for continues time The liner slides in between two bottles through its and bottles special constriction. Security is being provided with self-stick tape.

The components of the set are connected together by the use of the strips.

The set occupies very small place. The hidden cooler provides continues cooling, it doesn't interfere with the design of the containers and allows enjoying the overall look of the beverages and their containers.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG.1 is a general view of combined bottles with hidden cooler;

FIG.2 is the disassemble view of the set;

FIG.3 is the bottom plan view of two interlocked bottles;

FIG.4 is the cross-section view of two interlocked bottles with inserted cooler;

FIG.5 is the section view of the cooler showing the chamber.

DETAILED DESCRIPTION OF THE INVENTION

For a detailed description we need to refer to the Figure 2, that presents the components of the set. Backside of the bottle 1 has a cavity 4 with channel 5. Glass bottles 1 and 2 are identical. The cooler 7 has a chamber 8, which will be filled with a refrigerant and a closure 6. When two bottles interlock together, they create a cave, made by cavity 4 located to the backside walls of bottles 1 and 2. Spikes 3 are located on the back wall of the bottle and they prevent the sliding of the bottles. The cooler 7 slides in the cave made by cavity 4. Notches 9 and 10 are made for the plastic straps 12 and 14 that have locks 13 and 15 thereafter. Handle 11 is for easy grip and is also a part of the

design of the bottle. Figure 4 shows cross-section view of two interlocked bottles with inserted cooler, where the ice 17 is trapped between walls of the cooler, marked as 16. Figure 5 shows the sectional view of the cooler with the chamber 8.